DIRECT TESTIMONY

OF

RONALD LINKENBACK

# ENGINEERING DEPARTMENT ENERGY DIVISION ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON COMPANY

DOCKET NO. 07-0566

Proposed General Increase in Rates for Delivery Service

February 11, 2008

### TABLE OF CONTENTS

		<u>Page</u>
I.	Introduction	1
A.	Witness Identification	1
B.	Background and Qualifications	1
C.	Summary of Testimony and Recommendations	1
II.	Proposed Rider SEA - Storm Expenses Adjustment	
A.	Rider SEA Provides Improper Incentives	3
B.	Rider SEA's Storm Definition	9
C.	Alternative Recommendations	13
III.	Proposed Rider SMP - System Modernization Projects Adjustment	16
IV.	Rider ACT – Allowance for Customer-owned Transformers	16
V.	Rider ML	22
VI.	Major Capital Projects	22
VII.	Functionalization of the Major Capital Projects	24
IX.	Rider MSPS7 –Meter Service Provider Service 2007	
X.	Distribution Loss Factors in Rate RDS – Retail Delivery Service	26

1	I.	<u>Introduction</u>
2		A. <u>Witness Identification</u>
3	Q.	Please state your name and business address.
4	A.	My name is Ronald Linkenback and my business address is 527 East Capitol
5		Avenue, Springfield, Illinois.
6	Q.	By whom are you employed and in what capacity?
7	A.	I am employed by the Illinois Commerce Commission ("Commission") as an
8		Electrical Engineer in the Engineering Program Department of the Energy
9		Division.
10		B. <u>Background and Qualifications</u>
11	Q.	Please state your educational and experience background.
12	A.	I hold a Bachelor of Science degree in Electrical Engineering from Iowa State
13		University. I am a registered Professional Engineer in the State of California. I
14		was employed as an Electrical Engineer with San Diego Gas & Electric
15		Company for six years, then with the City of Highland, Illinois as the manager
16		of the municipal electric system and, before joining Staff of the Illinois
17		Commerce Commission ("Staff"), I worked for High Voltage Maintenance
18		Corporation as the manager of the Cleveland Division.
19		C. <u>Summary of Testimony and Recommendations</u>
20	Q.	What is the general purpose of this proceeding?
21	A.	On October 17, 2007, Commonwealth Edison Company ("ComEd") filed Rate
22		Schedule Sheets requesting Commission approval to increase their rates for

23		delivery service and after the associated tariff sheets. This proceeding is the
24		Commission's investigation of the delivery service tariffs filed by ComEd.
25	Q.	What are your duties and responsibilities associated with this docket?
26	A.	My assignment is to examine and offer my opinion on (1) whether and to what
27		extent ComEd's proposed major capital projects additions to rate base are
28		"used and useful", and (2) various new and modified tariffs proposed by
29		ComEd.
30	Q.	Are you recommending any revenue requirement adjustments associated
31		with ComEd's base rate delivery services filing?
32	A.	No.
33	Q.	Are you making any recommendations that oppose or take issue with
34		ComEd's proposals.
35	A.	Yes. I am recommending that the Commission reject: (1) ComEd's proposed
36		Rider SEA (Storm Expense Adjustment); and (2) certain ComEd proposed
37		revisions to existing Rider ACT (Allowance for Customer-owned Transformers).
38		I will also be making recommendations concerning ComEd's proposed Rider
39		SMP (System Modernization Projects Adjustment) in supplemental direct
40		testimony which is to be filed by February 26, 2008.
41	Q.	Did you review any other issues in this proceeding?
• •		
42	A.	Yes, I did. I reviewed the (1) ComEd proposed changes to Rider ML – Meter-
	A.	Yes, I did. I reviewed the (1) ComEd proposed changes to Rider ML – Meter- related Facilities Leasing; (2) major capital projects that ComEd is proposing as

	Service Provider Service 2007); (4) ComEd's proposed changes to the
	Distribution Loss Factors in Rate RDS – Retail Delivery Service; and (5)
	ComEd's proposed functionalizing of the major capital projects between FERC-
	jurisdictional assets.
Q.	What recommendations are you making in this proceeding regarding
	those other reviews?
A.	I do not take issue with ComEd's proposals regarding the other issues I
	reviewed, with the exception that I am supporting Staff witness Griffin's
	recommended common facilities functionalization adjustment.
II.	Proposed Rider SEA - Storm Expenses Adjustment
Q.	Briefly describe ComEd's proposed Rider SEA.
A.	Proposed Rider SEA is a cost tracking rider that will track operating and
	maintenance ("O&M") expenses related to storm restoration, and will result in a
	credit or a charge to customers depending, respectively, on whether actual
	costs fall below or above the base amount of O&M expenses related to storm
	restoration included in base rates.
Q.	Are you the only Staff witness addressing Rider SEA?
A.	No. Staff witnesses Luth (ICC Staff Ex. 6.0) and Hathhorn (ICC Staff Ex. 1.0)
	also address various aspects of Rider SEA.
	A. Rider SEA Provides Improper Incentives
Q.	What is your recommendation concerning ComEd's proposed Rider SEA?
	A. II. Q. A.

- A. I am recommending that the Commission not approve ComEd's proposedRider SEA.
- 68 Q. What is the basis for your recommendation?

- **A.** I based my recommendation on the following reasons.
  - Since Rider SEA provides for full recovery of all storm related O&M expenses on a going forward basis, it would provide a counter-productive economic incentive to ComEd to reduce or defer planned maintenance of its distribution system and the expenses associated with that planned maintenance so as to shift or convert those maintenance expenses to storm related O&M expense. In that way, ComEd could potentially reduce normal maintenance expenses which are recovered through base rates which could be expected to result in ComEd incurring increased storm related expenses and recovering that increased storm related expenses from customers almost immediately through Rider SEA. Reduced normal O&M expenditure could normally be expected to result in lower service reliability to ComEd's customers.
  - ComEd's proposed definition of a Rider SEA storm would allow ComEd too much latitude in determining when a storm occurs. This latitude, when considered with the counter-productive financial incentive to permit costs to shift from normal O&M expense to storm related O&M expense as discussed above, would further enable the shifting of normal O&M expense to storm related O&M expense by allowing ComEd to

declare more storms events and thereby increase its storm related O&M expenses.

Q. In your opinion, are there benefits to recovering storm related O&M expenses through base rates instead of a rider?

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

A.

- Yes. In my opinion, recovery of storm expenses through base rates motivates the utility to optimally maintain its system so that storms do the least practical amount of damage. While a utility cannot control when or how often its distribution system is subjected to severe weather, it can limit the damage severe weather inflicts on its distribution system (and the resulting costs to repair that damage) by providing a well-designed and maintained distribution system. Base rate recovery of storm related O&M expenses provides a financial incentive for a utility to minimize and control those costs since, for expenses recovered through base rates; a utility keeps all cost savings and incurs all cost increases that occur between rate cases. Since the utility is the only entity with the ability to control any of the storm related O&M costs, removing the financial consequences to the utility of increasing these normal O&M costs (by passing all such costs directly to ratepayers as storm related repair costs) removes or reduces the incentive to control those normal O&M costs and, all else equal, will result in costs that are higher than they would be in the case where the utility would be responsible for cost increases.
- Q. You state that ComEd has some control over storm related O&M costs can you please expand?

110 Α. Yes, while ComEd does not control the level of storm activity that will affect its 111 territory, it is in the best position to control the costs related to storm damage, 112 both prior to and after a storm. Prior to a storm, ComEd can control its storm 113 related expenses by its level of preparedness including, material inventory, 114 emergency operation training, the level of system maintenance. After a storm, 115 ComEd can control its storm related expenses by, again, the level the system 116 has been maintained, the timeliness of its response, the availability of needed 117 materials, crew availability and training, and company emergency 118 responsiveness. 119 Why do you believe ComEd would have an incentive to decrease general Q. 120 O&M below adequate levels if the Commission approves Rider SEA? 121 As noted in my previous answer, a fixed amount of base rate recovery of Α. 122 normal O&M expenses provides a financial incentive for ComEd to minimize 123 and control those costs by having a well-designed and maintained distribution 124 system. Proposed Rider SEA, though it would not entirely remove that 125 incentive, would offset that incentive with a strong and inappropriate incentive to permit those costs to be replaced by storm recovery expenses from 126 127 customers almost immediately through Rider SEA. 128 Rider SEA will provide an additional economic incentive, to what already exists 129 through fixed level base rate recovery of regular maintenance expense in the 130 longer term, by eliminating significant economic consequences (only for the 131 utility, not its customers) of failing to properly maintain the electric delivery

132 system. While regular maintenance expense recovery through base rates is 133 not fully guaranteed, Rider SEA would guarantee storm maintenance expense. 134 A significant negative economic consequence for an electric utility of failing to 135 adequately maintain its electricity delivery system is the increased cost of 136 repairing the system after a storm. 137 Thus, Rider SEA will almost immediately begin to shift the economic 138 responsibility for storm related repair costs from ComEd and transfer it to 139 ComEd's customers. The economic consequences of a ComEd decision to 140 neglect and/or reduce planned maintenance and the related expense to 141 inadequate levels will not result in higher costs for ComEd because of an 142 inadequately maintained system. It will result in guaranteed Rider SEA 143 recovery. 144 Q. In your opinion, will approval of Rider SEA have an affect on ComEd's 145 electric service reliability? 146 Α. Yes. In my opinion, Rider SEA will provide additional financial incentive for 147 ComEd to consider reducing planned maintenance. That reduction could very 148 easily result in inadequate levels and thereby reduce service reliability. 149 Inadequate maintenance will lead to increased numbers of equipment outages 150 and electric service interruptions both from storm related and non-storm related 151 events (i.e. trees, hardware failing, electrical load, and vehicles hitting poles 152 and wires, etc.). The result will be reduced reliability. 153 Q. Can Rider SEA be modified to reduce or eliminate this incentive?

154 Α. It is my opinion that it could be reduced to some degree, but it could not be 155 eliminated. Later in my testimony, I suggest a revision to Rider SEA that I 156 believe could minimize the incentives presented by the rider by placing a floor 157 on how low ComEd's annual reported reliability indices should be allowed to 158 worsen before the Rider is terminated. However, in my opinion, this suggested 159 revision would not eliminate the incentives but rather only reduces their 160 potential impact. 161 Q. Why are ComEd's reported reliability indices a reasonable means to 162 monitor ComEd's customer service reliability? 163 Α. As part of its annual reliability report (in compliance with 83 Ill. Adm. Code 164 411.140(a)) ComEd reports system-wide reliability indices shows how reliably 165 ComEd is serving its customers. This is the only set of figures that I know of 166 that the Commission requires from each electric utility that demonstrates how 167 reliable any utility's electric system is and has been. 168 Q. Does Staff have any on-going reviews of ComEd's reliability performance 169 that would reduce, eliminate or offset the incentives you discuss? 170 Α. Yes it does perform on-going reviews of every utility's reliability including 171 ComEd's reliability. Annually, Staff reviews every utility's reliability reports and 172 reliability performance. Each Illinois electric utility is to submit its annual report 173 by June 1 each year. Staff's review of the annual reliability reports includes a 174 review of the Company's reliability performance. Staff also, at times performs

175		onsite inspections of specific areas that were of are experiencing service
176		reliability problems.
177		Staff's review of the utilities' reliability performance are reported to the utilities
178		and the Commission. In my opinion, these reports in and of themselves are
179		not sufficient to totally eliminate or offset the unacceptable financial incentives
180		presented by Rider SEA to reduce ComEd's normal O&M expenditures.
181		B. Rider SEA's Storm Definition
182	Q.	What general problems do you see with ComEd's definition of a storm?
183	A.	ComEd's definition is too subject to variables controlled exclusively by ComEd
184	Q.	What variables does ComEd have some control over?
185	A.	Some of the storm variables that ComEd would have some control over are:
186		<ul> <li>When a storm has occurred and what constitutes a storm,</li> </ul>
187		The service territory affected by the storm,
188		The number of customers affected by the storm,
189		What damage is storm related, and
190		When to activate its Emergency Operation Center(s)
191	Q.	Why should the definition of a storm not be subject to only variables
192		controlled by ComEd?
193	A.	If the definition is subject to variables that ComEd controls, and the Rider Sea
194		presents a significant possibility of recovery of O&M expenses that would
195		otherwise not be likely under a fixed level of base rate O&M recovery, then

196		ComEd could exercise its discretion in a manner that causes more and more
197		events to fall within the definition of a storm.
198	Q.	What specific issues do you have with ComEd's definition of a storm?
199	A.	I believe ComEd's definition of a storm, as stated in proposed Rider SEA, (1) is
200		not specific enough and is therefore too inclusive, and (2) provides too much
201		discretion to ComEd to determine when storms have occurred in its territory.
202	Q.	What criteria is ComEd proposing in Rider SEA to define when a storm
203		has occurred?
204	A.	ComEd lists three conditions in its proposed Rider SEA that must occur before
205		ComEd can collect expenses through Rider SEA.
206		(1) There must be an "act of nature with disturbance of the physical
207		environment in which the Company's service territory is located, including but
208		not limited to thunderstorm, microburst, tornado, cyclone, wind storm, snow
209		storm, blizzard, ice storm, flood, earthquake, or a system of one or more than
210		one such act" ComEd Ex. 12.18, Ill. C. C. No. 4, Original Sheet No. 623. (2)
211		The act of nature must result in "the interruption of electric service to, in
212		aggregate, a total of more than 10,000 retail customers each of which are
213		without service for more than three (3) hours." Id. (3) ComEd must activate at
214		least one of its Emergency Operation Centers (EOC). Id.
215	Q.	Do you have any issues with ComEd's first condition?
216	A.	Yes I do. ComEd is proposing, in Rider SEA, to define a storm as "any act of
217		nature with disturbance of the physical environment in which the Company's

service territory is located, including but not limited to thunderstorm, microburst, tornado, cyclone, wind storm, snow storm, blizzard, ice storm, flood, earthquake, or a system of one or more than one such act ...." Id. This definition is too broad and can virtually include any natural event. In other words, ComEd's proposal of "any act of nature" does not allow any outside party to know if a rainstorm that happened to include lightening somewhere within its borders (could be a light shower) is, in ComEd's opinion, a Rider SEA storm. Since this criterion establishes when a storm or weather event has occurred and, thus triggers Rider SEA recovery, any way that the criterion can be better defined, such as by an outside weather organization will provide more objectivity. Neither the National Oceanic Atmospheric Administration's (NOAA) National Weather Service nor any other national weather organization, to my knowledge, precisely define the weather condition terms listed by ComEd and therefore those terms are left subject to the Company's interpretation. Accordingly, I suggest that if specific physical conditions must occur to classify a disturbance as a storm that will allow ComEd to recover the associated O&M expenses in Rider SEA, the terms need to be definable and recognized by an independent outside expert like the NOAA that will officially record the status of the natural disturbance. This could, depending upon what degree the terms can be defined, result in a verifiable standard that is neither vague nor subjective.

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240	Q.	Do you have any suggested alternatives to ComEd's proposed definition
241		of a storm?
242	A.	Yes, I do. I suggest that, if the Commission decides to approve Rider SEA,
243		notwithstanding my concerns and recommendation to entirely reject it, the
244		Commission should modify the definition of a storm to the NOAA's National
245		Weather Service, or other weather service, defined criteria.
246		I am suggesting three threshold levels of weather as defined by the National
247		Weather Service (as found on the web at http://www.nws.noaa.gov/glossary/)
248		as a basis for determining when a Rider SEA storm has occurred these are, ice
249		storm, severe local storm, and severe thunderstorm. By setting the level of the
250		storm (storm "intensity", if you will) high, ComEd would not be able to charge to
251		and recover through Rider SEA those storm-related O&M expenses that
252		occurred because of, or near the same time, as moderate or light storms that
253		occur even if 10,000 customers were out of service for three or more hours
254		because of a poorly maintained electrical system.
255		Also, by suggesting three threshold levels of weather for when a Rider SEA
256		storm has occurred, the Commission would lessen the incentive for ComEd to
257		not properly maintain its distribution system and have any minor storm meet
258		the definition of a Rider SEA storm.
259	Q.	Do you have any concerns with the ComEd storm condition of 10,000
260		customers having to be out of service for more than three hours?

261	A.	Yes, I do. My concern with this condition relates to my comments regarding
262		ComEd's first condition on defining a storm. Unless it is very clear that a Rider
263		SEA storm has occurred, I cannot see how ComEd will be able to determine, or
264		Staff or any other party would be able to verify, that 10,000 customers were out
265		of service for three or more hours because of that storm.
266	Q.	If the Commission decides to approve Rider SEA against your
267		recommendation, do you have any suggested alternative to the 10,000
268		customers for three hours criteria?
269	A.	No, I do not. However, it is my opinion that my alternative recommendations
270		below address this problem.
271	Q.	Do you have any concerns with the ComEd condition that it must activate
272		at least one of its Emergency Operations Centers?
273	A.	No, I do not.
274		C. <u>Alternative Recommendations</u>
275	Q.	If the Commission approves Rider SEA against your recommendation, do
276		you have any suggested revisions that would reduce your concerns?
277	A.	The following two suggested revisions to Rider SEA address to some extent
278		my concerns that ComEd has too much latitude on when a Rider SEA storm
279		has occurred, and that Rider SEA will be providing a negative financial
280		incentive to ComEd to not properly maintain its distribution system and thereby
281		reduce the service reliability to its customers.

(1) As mentioned previously, the Commission should change the definition of a storm for Rider SEA purposes. I suggest that the Commission select the definitions used by the NOAA National Weather Service for ice storm, severe storm, and severe thunderstorm.

(2) I am also suggesting that the Commission modify Rider SEA to terminate charges to customers under Rider SEA if ComEd's service reliability deteriorates significantly. While such a clause would not fully address my concerns regarding the improper incentives provided by Rider SEA, it would at least provide for some form of safeguard for ratepayers against deterioration of service reliability. The proposed clause is:

If the Company's most recent yearly reported System Average Interruption Frequency ("SAIFI") or Customer Average Interruption Duration Index ("CAIDI") reliability indexes, as reported annually to the Commission in compliance with Section 411.120(b) of the III. Adm. Code is more than 1.68 for SAIFI or 193 for CAIDI, the Company shall within ten (10) days of such annual report file an informational filing to cease the Storm Adjustment in the next monthly billing period.

#### Q. What is SAIFI?

**A.** SAIFI is an acronym for System Average Interruption Frequency Index. SAIFI shows how often, on an average, each customer on the electric utility will be out of service over a period of time (normally one year). The higher the index number, the worse the service is to the average customer because that average customer experienced more outages that year.

#### Q. What is CAIDI?

A. CAIDI is an acronym for Customer Average Interruption Duration Index. CAIDI shows the average length of time that each customer that experienced an outage was out of service. The CAIDI value is the total number of minutes the average customer who lost service was out of service. The higher the CAIDI value, the longer the average customer was without electric service.

### Q. How were the proposed SAIFI and CAIDI index threshold values determined?

Α.

The SAIFI and CAIDI index threshold values I am proposing are 15% greater than the worst index value reported by ComEd over the past eight years of Code Part 411 reliability compliance filings. I believe the 15% margin will address the normal fluctuation of the reliability indices, but will still be low enough to be triggered if ComEd were to reduce its normal O&M expenditures to such an extent that its distribution system is not adequately maintained. The ComEd reported SAIFI and CAIDI indexes for years 1999-2006 (last reported year) are:

Year	SAIFI	CAIDI	
1999	1.46	139	
2000	1.43	144	
2001	1.29	103	
2002	1.06	96	
2003	1.31	168	
2004	1.21	128	
2005	1.18	104	
2006	1.43	149	
Average	1.3	129	

The proposed threshold index for SAIFI (1.68) is approximately 30% higher than the average for the eight years ComEd reported value, 1.30 versus 1.68.

323		For CAIDI, the proposed threshold value (193) is 50% greater than the eight-
324		year ComEd average value, 129 versus 193.
325		ComEd's 2007 reliability report is not due to be filed with the Commission until
326		June 1, 2008, but ComEd has already provided Staff with its 2007 system-wide
327		SAIFI and CAIDI index values. ComEd's 2007 SAIFI is 1.57 and its CAIDI is
328		191. These values are very close to the index numbers proposed in the above
329		clause. Staff still believes the values proposed in the clause are reasonable
330		when consideration is given to the nine-year history of the index values for
331		ComEd. Also, Staff believes that if ComEd has reasons for why its indices are
332		high, it should be provided the opportunity to present those arguments in a
333		motion requesting waiver from this clause of the rider on a year-to-year basis.
334	III.	Proposed Rider SMP - System Modernization Projects Adjustment
335	Q.	Briefly describe ComEd's proposed Rider SMP.
336	A.	Proposed Rider SMP would allow ComEd to recover a return on specific
337		Commission approved capital projects, in between rate cases.
338	Q.	What is your recommendation concerning ComEd's proposed Rider
339		SMP?
340	A.	I will address Rider SMP in supplemental direct testimony which is to be filed by
341		February 26, 2008.
342	IV.	Rider ACT – Allowance for Customer-owned Transformers
343	Q.	Briefly describe the provisions in ComEd's Rider ACT.

344	A.	Existing Rider ACT provides a monthly credit to those nonresidential customers
345		that own and maintain their own transformers and associated electrical
346		equipment.
347	Q.	What changes is ComEd proposing to Rider ACT?
348	A.	In this proceeding, ComEd is proposing to revise Rider ACT (ComEd Ex. 12.19,
349		ILL C.C. No. 4, 1 <sup>st</sup> Revised Sheet No. 591 (Cancelling Original Sheet No. 591)
350		in the following ways:
351		Rider ACT will not be open to future customers.
352		Those customers that have received more than 30 years of credit for
353		customer-owned transformers will be removed from Rider ACT. These
354		customers would receive a single payment worth one year of credits.
355		Provide customers that have received a Rider ACT credit for less than
356		30 years the option to be removed from Rider ACT and receive a single
357		payment worth two years of credits.
358		Those customers served under Rider ACT that either are mandatorily
359		removed or take the optional removal from Rider ACT would not be
360		eligible to come back under the Rider later.
361	Q.	What is your recommendation concerning the changes ComEd is
362		proposing to Rider ACT?
363	A.	I am opposing ComEd's proposal of mandatory removal of customers from
364		Rider ACT that have received more than 30 years of credit. However, I am not
365		opposing (1) ComEd's proposed language that limits the provision of Rider ACT

366 to only existing participants, (2) ComEd's offering Rider ACT customers the 367 option to voluntarily stop receiving the Rider ACT credit, or (3) the provision that 368 those existing Rider ACT customers that decide to stop receiving the Rider 369 ACT credit cannot come back under the Rider at some later date. 370 Q. Is it your understanding that ComEd wants to remove those customers 371 that have received more than 30 years of credit from Rider ACT? 372 A. Yes, that is my understanding based upon ComEd Ex. 12.0, page 22, lines 373 378-381, where Mr. Alongi and Dr. Jones state that "this proposal is based 374 upon the concept that the useful life of a transformer is generally about 30 375 years, and the provisions of credits for a transformer need not extend beyond 376 the transformer's useful life." 377 Why do you disagree with ComEd's proposal for mandatory removal of Q. 378 certain customers from Rider ACT? 379 Α. ComEd's basis for wanting to remove those customers that have been on Rider 380 ACT for more than 30 years is not sufficient. ComEd is basing the mandatory 381 removal of certain customers from Rider ACT on how long those customers 382 have received the Rider credit. ComEd indicates that it selected the 30 year 383 break off point based on the useful life of a transformer is "generally about 30" 384 year" (Ex. 12.0, p. 22, l. 379) and not on the age of the specific customer 385 owned transformers. I disagree with ComEd's logic because (1) ComEd does 386 not know how old the customer-owned transformers are or if customers have 387 replaced their transformers one or more times within the 30-year period

(ComEd response to Staff request RDL 3.2); (2) ComEd did not provide any further discussion or evidence explaining or proving why the 30-year period is reasonable, only that the useful life of transformers is "generally about 30 years"; (3) ComEd has not provided any evidence explaining why this proposed change would not harm some, if not most, of those customers that would be removed from Rider ACT, and (4) ComEd has not provided any evidence explaining that this change would be beneficial ComEd's customers.

## Q. Do you have any other comments concerning ComEd's proposed changes to Rider ACT?

A.

Yes I do. Using ComEd's logic that the 30-year useful life of a transformer should define when Rider ACT credits should end, I would also think the reverse should apply — i.e., customer payments to ComEd should also end after 30 years. Using ComEd's logic from Rider ACT, customer rental charges under Rider NS (nonstandard charges) should have the same timeframe limit and end after 30 years. However, ComEd has not made that proposal. It seems that for purposes of Rider NS, ComEd has chosen to acknowledge its own responsibility to maintain and replace transformers indefinitely, but for purposes of Rider ACT seeks to ignore its customers' need to do the same thing.

I would add that this is not the first time ComEd has proposed for the Commission's consideration revisions to the Customer-Owned Transformer's tariff. Rider ACT's predecessor was Rider 8 (Allowance for Customers Owned

410		Transformers). ComEd, in Docket No. 05-0597, proposed eliminating Rider 8.
411		The Commission in its Order in that docket denied ComEd's request.
412	Q.	What were the Commission conclusions pertaining to Rider 8 in Docket
413		No. 05-0597?
414	A.	The Commission decided to retain Rider 8 (now named Rider ACT) without
415		modification. The Commission stated that there was not sufficient information
416		to terminate Rider 8. The Commission also stated that the Rider 8 customers
417		were not adequately compensated by ComEd's proposal (In re Commonwealth
418		Edison Co., ICC Docket No. 05-0597, Order at 227-228 (July 26, 2006)).
419	Q.	What were ComEd's recommendations in Docket No. 05-0597 pertaining
420		to Rider 8?
421	A.	ComEd's primary proposal recommended eliminating Rider 8 and paying all
422		customers one year's worth of Rider 8 credits. In the alternative, if the
423		Commission decided to not eliminate Rider 8, ComEd wanted to limit Rider 8 to
424		only existing customers.
425	Q.	What were your recommendations in Docket No. 05-0597 pertaining to
426		Rider 8?
427	A.	I recommended that Rider 8 not be eliminated and if the Commission decided
428		to allow ComEd to eliminate the rider, ComEd should not pay each customer
429		one year's worth of credit but instead ComEd should negotiate individual
430		termination payments with each Rider 8 customer.

Q.	What impact does the Commission decision in Docket No. 05-0597 have
	on this case?
A.	The conclusions the Commission reached in Docket No. 05-0597 regarding
	Ride 8 (Allowance for Customers Owned Transformers) that are applicable to
	Rider ACT's (Allowance for Customers Owned Transformers) issues in this
	proceeding are:
	In addition, we do not see the termination of Rider 8 to be appropriate given that approximately 140 of the 225 customers would no longer recover the money they invested in the purchase of one or more transformers. Rider 8 customers purchased transformers with the expectation that Rider 8 credit would compensate them for their cost of purchase. To leave those customers without adequate compensation causes a harm that is not justified at this time. (Order, p. 227-228)
	The conditions stated in the Commission Order for Docket No. 05-0597 still
	apply now, two years later, with 129 out of the 229 Rider ACT customers
	having received Rider credits for 30 or more years. (ComEd response to Staff
	Data Request RDL 1.5)
Q.	Do you have any other comments concerning ComEd's proposed
	changes to Rider ACT?
A.	I do have one closing point pertaining to Rider ACT. As I had stated in Docket
	No. 05-0597, I still believe that if ComEd wants to eliminate Rider ACT or
	reduce the number of customers on this Rider the best way to do this is by
	negotiating with each Rider ACT customer individually, instead of asking the
	Commission to either impose mandatory elimination of Rider ACT or some
	general buyout value.
	A.

456	V.	Rider ML – Meter-related Facilities Lease
457	Q.	Describe your investigation and opinion on the proposed changes to the
458		costs associated with the Rider ML – Meter-related Facilities Lease?
459	A.	ComEd proposes to revise most of the Rider ML monthly rental charges for
460		meter related facilities. I examined the process ComEd used to develop the
461		revised monthly rental rates. Specifically, I asked ComEd to provide
462		workpapers documenting the changes for three devices: automated meter
463		reading meter, 277/480 volt potential transformer, and 480 – 5000 volt current
464		transformer.
465		In supplemental response to Staff data request RDL 1.15, ComEd corrected
466		inadvertent errors in connection with application of the inputs that affects the
467		rental amounts that were calculated for all the meter related facilities. Based
468		on my review of the revised Rider ML monthly rental rates, I am not opposing
469		the proposed changes to Rider ML.
470	VI.	Major Capital Projects
471	Q.	What portion(s) of ComEd's proposed plant addition adjustments to rate
472		base did you investigate?
473	A.	I examined ComEd's major capital investments to its distribution system
474		infrastructure. Specifically I investigated the five major capital projects listed on
475		ComEd's Schedule F-4. I also examined the next ten largest major capital
476		projects.

411	Q.	Based on your examination of these major capital projects, do you
478		recommend that the Commission allow rate base treatment of the
479		projects?
480	A.	Yes. Based on the information provided by ComEd in its filing and in response
481		to discovery requests, I find no reason for the Commission to deny rate base
482		treatment for the projects or any portion of the projects.
483	Q.	What criteria did you utilize to reach your conclusion concerning the
484		addition of ComEd's major capital projects to the rate base?
485	A.	I used Section 9-211 of the Act as my guideline.
486		Section 9-211 of the Act states,
487 488 489 490		The Commission, in any determination of rates or charges, shall include in a utility's rate base only the value of such investment which is both prudently incurred and used and useful in providing service to public utility customers.
491		Based on my understanding of Section 9-211 of the Act, any addition should be
492		both prudent and used and useful to be included in a utility's rate base.
493		Information provided by ComEd in their filing and in response to discovery
494		requests indicated that the projects identified previously were prudent and used
495		and useful.
496	Q.	What specific information did you review as part of your investigation in
497		determining that the major capital projects were prudent and used and
498		useful?

499 Α. For the five major projects ComEd listed on Schedule F-4, I examined the 500 ComEd project reports, reports to management, and the ComEd consultant 501 reports of each major capital project. 502 For the next ten major projects, I verified that ComEd followed the same 503 internal review procedures as were followed for the five major projects. For one 504 of the ten next largest projects, Plainfield TDC 454 – transformer installation, I 505 reviewed the supporting data to confirm that a reasonable set of alternative 506 solutions were examined. Did you review any other ComEd proposed plant addition adjustments to 507 Q. 508 rate base? 509 Α. No. 510 VII. **Functionalization of the Major Capital Projects** 511 Q. Describe your investigation with respect to the functionalization of the 512 major capital projects. 513 A. ComEd witness McMahan (ComEd Ex. 5.0, pp. 46-51) described how ComEd 514 applied the FERC seven-factor test to functionalize facilities between Illinois-515 jurisdictional assets and FERC-jurisdictional assets. I focused on whether 516 ComEd correctly applied the FERC seven-factor test to the major capital 517 projects. I examined ComEd provided workpapers documenting the 518 functionalization of the plant additions between distribution and transmission 519 function, per the seven-factor test identified in FERC Order 888. With the one 520 exception raised by Staff witness Griffin (ICC Staff Ex. 2.0) pertaining to

521 common facilities, in my opinion ComEd appropriately applied FERC's seven-522 factor test to the major capital projects. 523 Q. What is Staff witness Griffin's recommendation pertaining 524 functionalization? 525 Α. Staff witness Griffin is recommending that the common substation facilities 526 (land, structures, fencing, and security equipment) be allocated between 527 functions on the same percentage basis as the transmission and distribution 528 facilities in that substation. ComEd is allocating all the common facilities at a 529 particular location to either transmission or distribution depending on which of 530 those functions has a greater percentage at the particular combination 531 substation location. 532 Q. Do you agree with Mr. Griffin's recommendation? 533 Α. Yes I do. In my opinion the FERC seven factor test does not set forth a specific 534 procedure to handle common facilities in substations. I believe that the 535 adjustment Mr. Griffin recommends and the reasons he sets forth in his 536 testimony for his recommendation are reasonable. I would add that, to the best 537 of my knowledge, in the past the Commission's engineering department has 538 not looked into the issue which Mr. Griffin raises in his testimony. 539 VIII. Rider MSPS7 – Meter Service Provider Service 2007 540 Q. What is your recommendation concerning the proposed changes to Rider 541 MSPS7 – Meter Service Provider Service 2007?

542	A.	ComEd is proposing monetary revisions to various services it is offering under
543		Rider MSPS7. I reviewed ComEd's proposed changes and the supporting
544		documentation and found no reason to oppose the proposed changes.
545	IX.	<u>Distribution Loss Factors in Rate RDS – Retail Delivery Service</u>
546	Q.	What is your recommendation concerning ComEd's proposed changes to
547		the Distribution Loss Factors?
548	A.	I am not opposing ComEd's proposed changes to the Distribution Loss Factors
549		(DLF). ComEd is proposing various changes to its DLFs based on the results
550		of its 2007 line loss study. ComEd is using the same procedure to calculate the
551		line losses as was approved in Docket No. 05-0597. ComEd used a 2003 line
552		loss study in Docket No. 05-0597.
553		The two issues I investigated pertaining to ComEd's proposed changes to the
554		DLFs were (1) the basis for average system line loss to increase from 6.12%
555		for the 2005 ComEd rate case to 6.49% in this proceeding, and (2) the basis for
556		line loss factors for High Voltage delivery class customers to increase from
557		1.35% in 2005 to 1.99% or 3.30% in this proceeding.
558	Q.	Has ComEd provided sufficient information to resolve your concerns with
559		the proposed Distribution Loss Factors?
560	A.	Yes, ComEd has. ComEd's line loss report listed many changes that occurred
561		since the 2003 study, as did ComEd's responses to various data requests.
562		Some of the major revisions that resulted in the changes to the DLFs in this
563		proceeding are:

564		ComEd explained that it performed a more accurate survey and accounting of
565		load profiles, and substation and distribution transformers on its system.
566		ComEd also explained how it better allocated the losses incurred on the lower
567		voltage system to the supply or higher voltage delivery classes.
568		ComEd explained that the increase in the HV delivery class customer loss
569		factor was due in part to understating the total high voltage transformer
570		nameplate capacity in the previous study.
571	Q.	Do you have any other issues you wish to address in your direct
572		testimony?
573	A.	No.
574	Q.	Does this conclude your testimony?
575	A.	Yes, it does.